

REMARKS/ARGUMENTS

The applicants acknowledge with appreciation that allowable subject matter was found in claims 3, 4, 7 and 9-11.

In this connection, claim 2 is being amended to include a feature corresponding to that of allowed claim 7, as follows:

2. An ultrasonic bonding method according to claim 1, wherein the material is bonded to the bonding surface while urging the clamping member at a node of the clamping member, in such a direction that the clamping member presses the material against the application member.

This amended claim should be allowed for the same reason claim 7 was allowed.

Claims 1, 2, 6 and 8 have been rejected as being anticipated by Akiyama et al. Claims 1, 2, 5 and 6 have been rejected as being anticipated by Gratz et al.

These rejections were discussed in a telephone interview with the Examiner on November 23, 2004. Each of the independent claims recites a step or device for "clamping two side faces of the material in the direction of ultrasonic vibration." See for example Fig. 4. The direction of the ultrasonic vibration U_{out} is horizontal. The chip 4 is clamped on one side of the chip in the horizontal direction by the contact member 17 which applies the ultrasonic vibration. On the other side, the chip 4 is clamped by the contact member 37.

In contrast, neither of the two references clamps two side faces of the material "in the direction of ultrasonic vibration."

In Akiyama, as best understood, it appears that the clamping direction of the workpieces is vertically from the top and from the bottom in Fig. 1, and horizontally from the left and the right in Fig. 2. In contrast, in both Figures, the direction of vibration appears to be into and out of the plane of the drawings. See col. 3, lines 41-45.

As for Gratz, again as best understood, strips 2 to be bonded are clamped in the vertical direction as seen in Figs. 2 and 4. In Fig. 2 the strips are clamped by the first and second clamping plates 4, 6 against the abutment plate 7. In Fig. 4 the strips are clamped against the

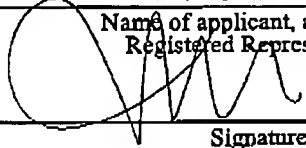
abutment plate 7 by the first clamping plate 4 and by the clamping and vibrating plate 12. After clamping, the strips are bonded by vibrations applied by the vibrating plate 5 in both figures; and in addition by the clamping and vibrating plate 12 in Fig. 4.

The direction of vibration is not explicitly stated in Gratz. However, as best understood, the abutment plate 7 is stationary in the vertical direction. Only the respective vibrating plates 5 and 12 are disclosed to move. Therefore the vibration direction cannot be vertical. It follows that Gratz cannot disclose two side faces of a material clamped and vibrated, as stated in claim 1, "in the direction of ultrasonic vibration respectively with an application member ..., and a clamping member that is synchronously vibrated in the same direction as that of the application member"

For at least the foregoing reasons, Akiyama and Gratz neither disclose nor suggest the inventions of claims 1, 2, 5, 6 and 8. A Notice of Allowance referencing all of claims 1-11 is therefore requested.

I hereby certify that this correspondence is being faxed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, at (703) 872-9306 on December 6, 2004:


James A. Finder

Name of applicant, assignee or
Registered Representative


Signature
December 6, 2004

Date of Signature

Respectfully submitted,



James A. Finder
Registration No.: 30,173
OSTROLENK, FABER, GERB & SOFFEN, LLP
1180 Avenue of the Americas
New York, New York 10036-8403
Telephone: (212) 382-0700

JAF:msd